



Inventory of Pagan Monuments

PAGAN newsletter 1984

An inventory of Pagan monuments has been badly needed for a long time: is not King Moynyi-in, who ruled in Ava from 1425 to 1438 AD, said to have ordered the monuments of Pagan to be counted, their number at that time exceeding 4000?

Numerous books and articles have been published, in Burma as well as in other countries, on Pagan architecture but up until now all these studies have, understandably enough, limited their selection to the most famous and venerated monuments. *Old Burma – Early Pagan* by G. H. Luce is by far the most comprehensive study on Pagan but, as its title suggests, it deals only with the first half of Pagan period and does not include the numerous monuments built after 1165 AD. The *Pictorial Guide to Pagan*, several times reprinted by the Burmese Government, is the most easily available book and it provides photographs of forty-seven monuments with a short notice on each of them. An *Archaeological Guide to Pagan* in Burmese, by U Bo Kay, contains descriptions of more than one hundred monuments but without either plans or photographs.

Articles on Pagan published in various magazines or scholarly reviews usually feature panoramic photographs of the site preceding the historical or architectural description of the principal monuments and, when they do include architectural drawings these are nearly always the already frequently published small scale plans of Ananda or Thatbyinnyu Temples.

Photographs (the most complete collection being at the Department of Archaeology, Rangoon) are the best documentation on the actual shape and details of the buildings before the damage wrought by the earthquake of 8 July 1975. The existing collections were not systematically recorded however and, once again, they give priority to the most important monuments; and the case is similar in respect of architectural records and drawings.

These major monuments however are not, by and large, the most significant. As they have always been great places of worship and pilgrimage for the Burmese people, with monks gathering and collecting public donations, they have also, except during periods of great disturbance, been regularly maintained and periodically renovated (there are numerous inscriptions, from the 13th century to the present day, which celebrate the erection of a new image of Buddha, the fitting of a new finial on top of a monument, the repairing of masonry after an earthquake... etc.) and occasionally altered and whitewashed. Whatever the importance of monuments like Shwezigon or Ananda on the Pagan skyline and in the study of epi-

graphy or iconography, it must be acknowledged that an immense number of secondary monuments, some in fair condition and others more or less dilapidated, provide a more reliable archaeological record of the Pagan period; yet apart from a few exceptions, these 'secondary' monuments have never been studied, recorded or systematically photographed.

Furthermore, the comparative study of all the monuments will bear witness to the creativity of Burmese architects. It has been said that there are no two identical monuments in Pagan, and this is probably correct; the inventory will show that their differences do not depend upon a few centimetres in their size or upon slight variations in their decorative patterns but actually result, in most cases, from the genuine diversity of their architectural designs.

The chief distinction amongst Pagan monuments is traditionally between temples and stupas, but there are borderline cases where the external shape tends to be rather similar. Amongst temples and monasteries, well known designs display either a central shrine, or a central solid core surrounded by a vaulted corridor. The corridor can also surround a shrine rather than the solid core, and the plan can be completed by entrance hall and porch on one or several sides. This inventory will show however that these basic configurations can evolve into more varied designs, as for instance where the entrance hall is combined with the shrine and is completed by a corridor (e.g. 37, 298), where the shrine becomes circular under a stupa-shaped dome (e.g. 164)... etc.

The inventory will serve to answer fundamental questions as for instance:

- how many monuments of a specified type are there? Where precisely are they located? Are they contemporaneous?
- in how many monuments is a particular pattern of mural painting to be found? Where are they located, etc.?
- is the plan of a given monument unique? Which monument is built to a similar design, in which details are they similar and in which different?

More generally, the inventory will help to define a precise typology of the buildings, to clarify their chronology, to introduce a systematic survey of their decoration. Towards the conservation of Pagan monuments it will allow for an objective assessment of their relative importance, essential in setting up priorities in the implementation of conservation measures.

Lastly, the need for an inventory is urgent and imperative when the seismic threat to the Pagan region is taken into consideration: the reinforcement methods proposed by the Iziis team under the present project (see Pagan Newsletter 1983) can only be implemented as a progressive process and on a limited number of monuments. In the event of an earthquake the inventory will provide decisive assistance in any restoration activity, and will also be the only mean of preserving at least the memory of the monuments in case of total destruction.

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Today in the Conservation office at Pagan, are two manuscript lists of monuments, each of them giving a reference number for each structure with a very brief description (e.g. small stupa, ruined monastery, etc.) and its approximate location (south-east of such and such village, north of another monument, etc.). These data are meagre and often ambiguous and, in many cases, it is difficult or impossible to determine, in the field, which monument is being dealt with. Furthermore, there is no archaeological map of the area giving the location of all listed monuments.

The order and consequent numbers of the listed monuments are too often illogical or irrelevant. Two monuments can be quite closely located and near in their date but may be given numbers distant from one another; the numbering can be quite regular in one sector, then jump to another area for a few numbers only to return in the first sector.... In spite of this, it was decided not to introduce a third numbering system, and the number given in the inventory is the 'new list number', with minor

alterations when absolutely necessary. The 'old list number' is given (between brackets) for each monument for easier cross reference to previous publications.

The Inventory

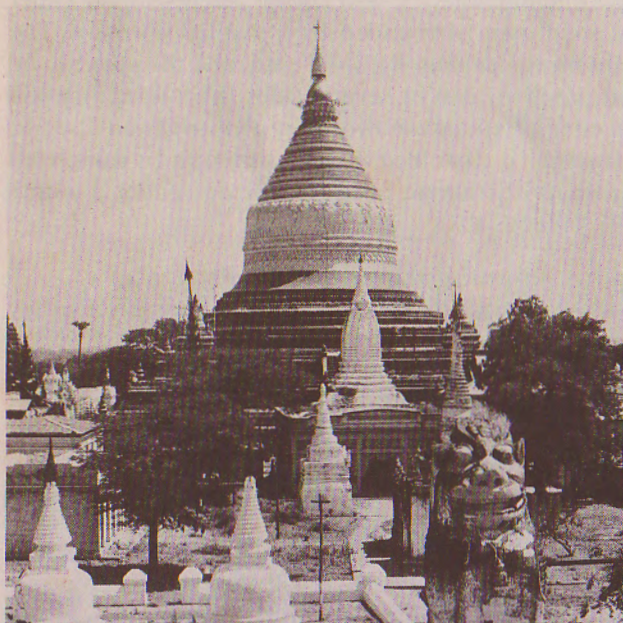
The volumes of the inventory will generally devote one page to each monuments, whilst the greater or specially complex monuments will be dealt with in two or more pages.

For each monuments, the following data will be given:

A/INVENTORY NUMBER (with mention of the 'old list number').

B/NAME when applicable.

C/BROAD LOCATION by reference to a village, a landmark or a prominent monument, and COORDINATES. These coordinates refer to a 1:10,000 scale map of the site which is drawn concurrently. On this map, a kilometric square grid has been traced, based upon Shwezigon stupa, a monument easy to identify and conspicuous in the Pagan landscape and which bears the number 1 in both lists as well as in the inventory. By convention, the north-south line set on Shwezigon has been given the quotation of km 10.000, and the corresponding east-west line km 50.000. For information, the geographical coordinates of Shwezigon stupa are 21° 11' 42" North and 94° 53' 50" East.



1 – Shwezigon: the great stupa from west.



73 – Swe daw gu: a two-storey monastery with pyathat crowning.



317: a stupa on a square base.

D/SHORT DESCRIPTION, under the following headings:

1 – **type of monument** (stupa, temple, monastery, etc.) and a size classification according to the largest dimension of the ground plan:

small monument	less than 10 metres
medium monument	from 10 to 20 metres
large monument	from 20 to 40 metres
very large monument	more than 40 metres.

– **number of storeys.** By storey is meant, for temple and monastery, an interior level accessible by an internal staircase and excluding blind corridor or room as well as tiered terrasses.

– when applicable, site features of the monument: boundary wall, gate, relationship with another monument.

2 – **description of the plan of each storey:** major features (shrine, solid core, corridor, entrance hall and forepart, etc.) with their principal dimensions.

3 – **description of upper parts:** number and shape of tiered terrasses (from bottom to top), type of crowning (tower, dome, spire, etc.).

4 – **construction details:** main material (brick, stone), average size of bricks, type of vaulting, etc.

5 – number and type of the principal **image(s)** of Buddha.

6 – **decoratives characteristics:** stucco carving (mostly on the outside), mural paintings inside, with their main features and an estimate of the percentage remaining of original decoration.

7 – **epigraphy:** when applicable, reference to stone inscription, note on ink gloses or graffiti, dates provided by epigraphy.

8 – **construction date or estimated period.**

9 – **references to earlier publications.**

E/PLAN OF THE MAIN STOREYS, showing the architectural design of the monuments. The principal dimensions have been measured together with some details. The plans will thus be fairly accurate but cannot be used as a substitute for the precise and comprehensive survey required for an architectural monograph.

F/A CHOICE OF SIGNIFICANT PHOTOGRAPHS.

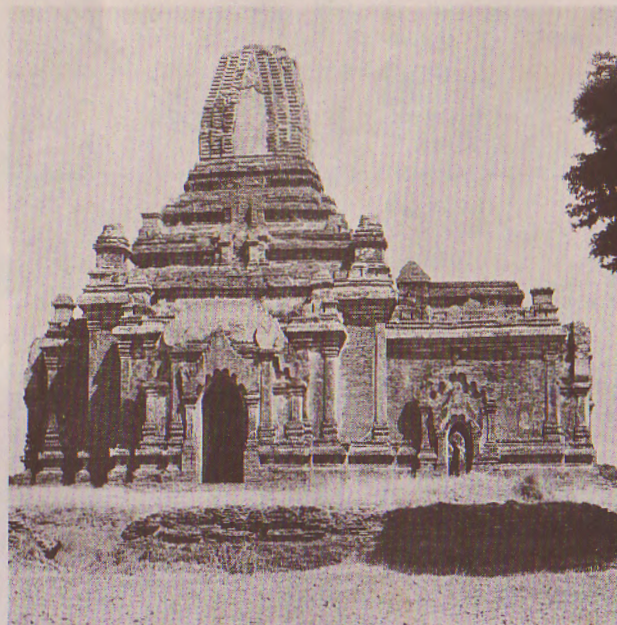
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The inventory will be completed by a tabular index which allows for identification of monuments according to their major characteristics, a statistical analysis of the recorded data, thematic tables, and the archaeological map of the area at 1:10,000 scale.

Its 8 volumes are expected to be published in the collections of École Française d'Extrême-Orient (Paris). The first volume (monuments 1 to 255) will be ready for publication in the near future, while the field work for the second volume is presently under completion.



164 – Pyan kyi gu: a stupa-shaped temple, with a circular shrine under a singhalese-type finial.

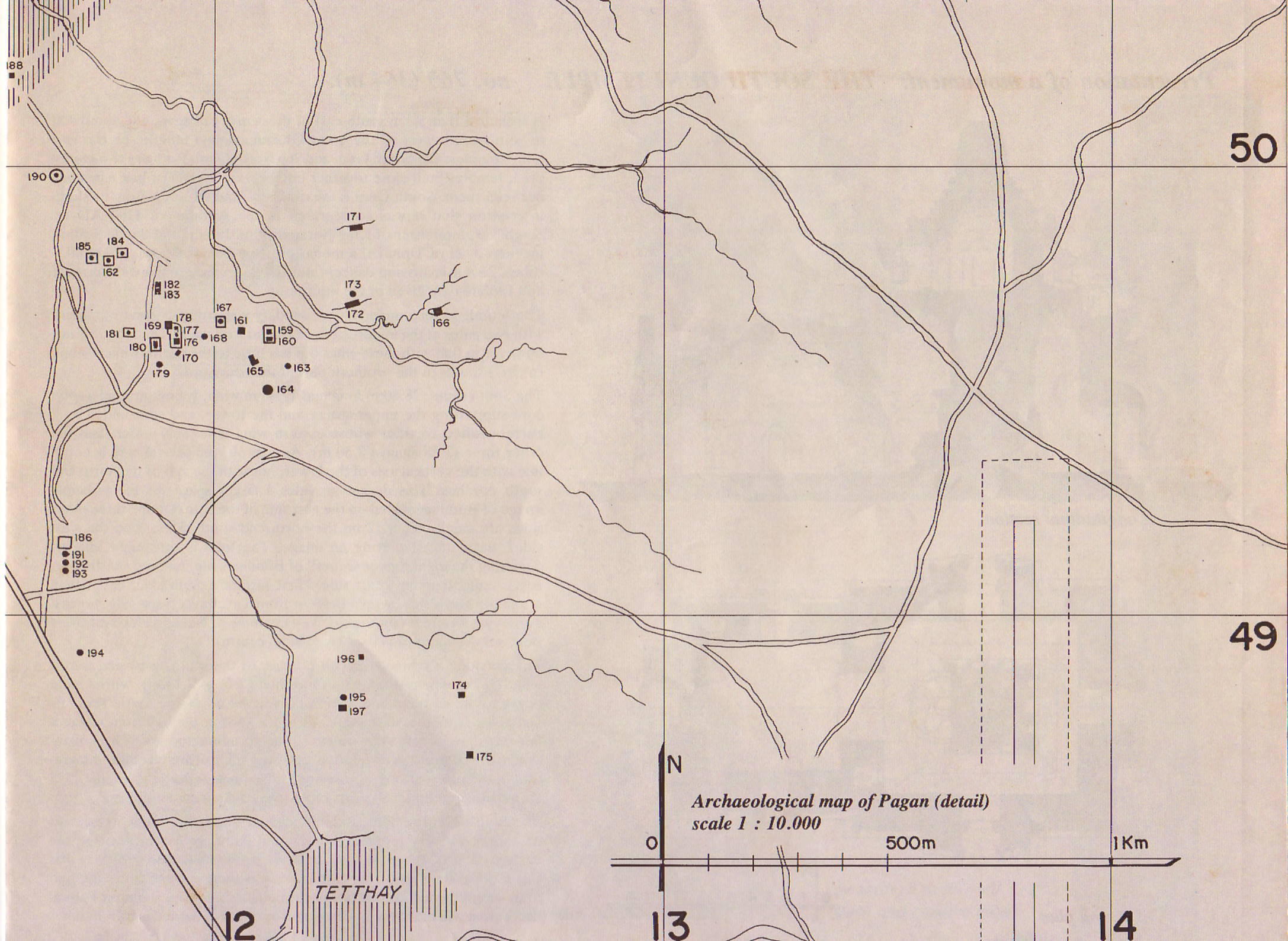


259 – Shwe leik too: a single-storey temple with a corridor around a solid core and an entrance hall on the eastern side (south face).

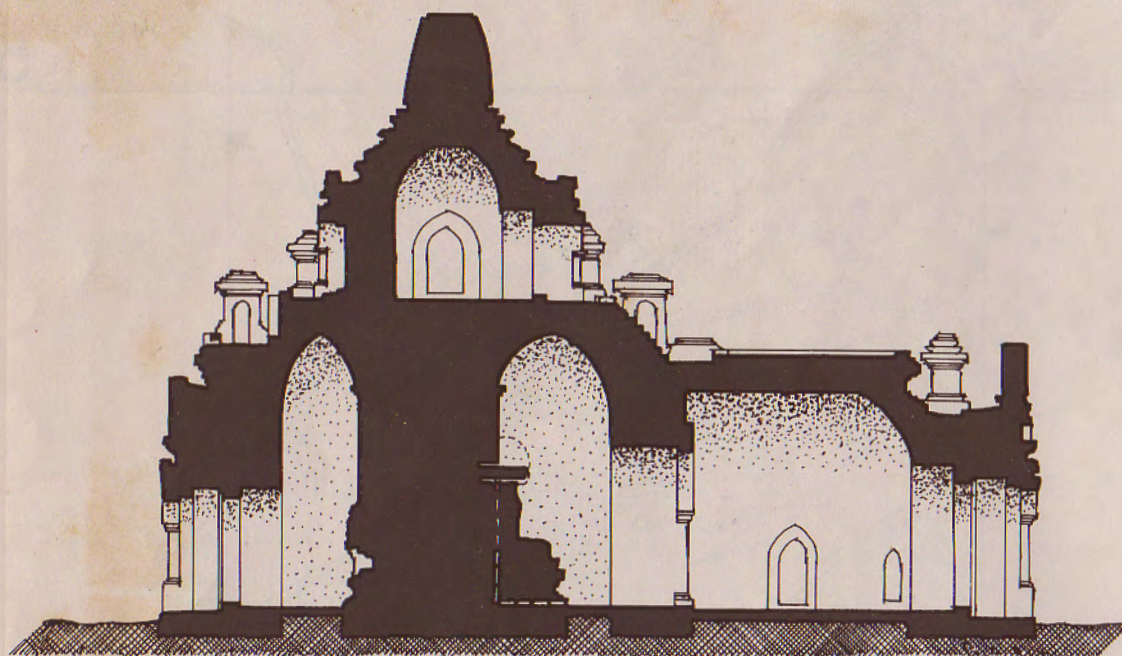


141 – Chauk phaya hla nge: a small temple with a central shrine, crowned by a bellshape dome and conical spire.

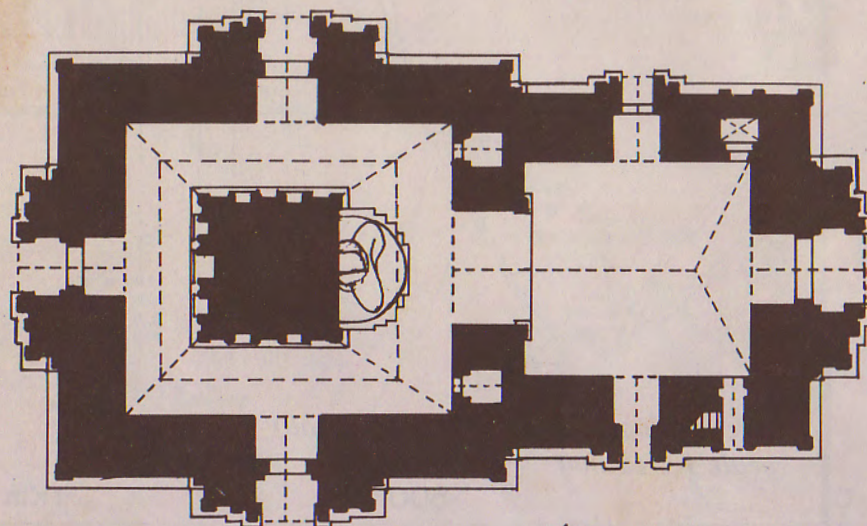




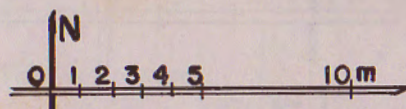
Presentation of a monument: THE SOUTH GUNI TEMPLE no. 765 (364 m).



Longitudinal section



Ground plan



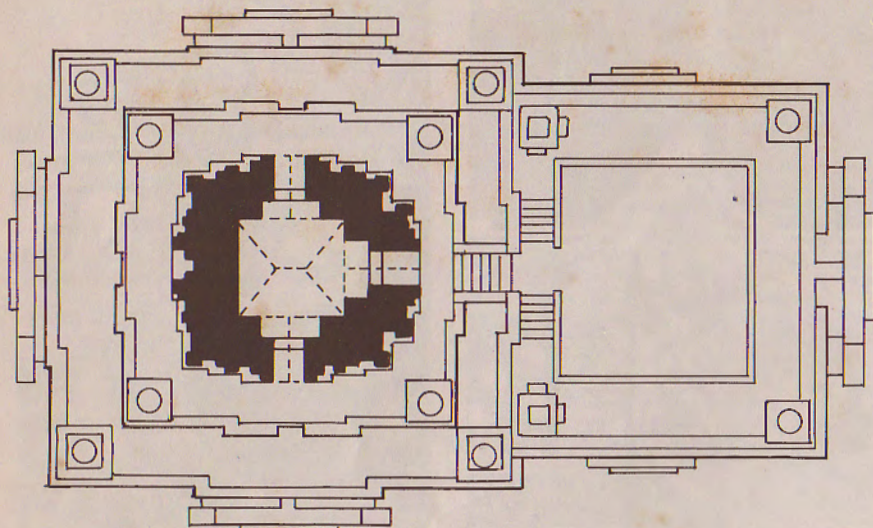
A little less than 2 km south-east of the centre of Pagan, and about 400 m south-south-west of the great Dhammayangyi temple, lie the two Guni temples: 765 South Guni and 766 North Guni. Both are two-storey brick temples built close together but with an interval of half a century between them. South Guni is the older one and we know from its stone inscription that it was consecrated in the Autumn of 1190 AD by Singhasur, a minister of King Narapatisithu. In addition the dedication includes a set of Tipitaka, a monastery, rice-fields at Taba, 120 monks' robes, 23 musicians and dancers and 100 slaves, whose names (Burmese and Indians) are given in the inscription.

The temple is surrounded by a boundary wall, roughly square in plan, with two gates at the middle of the east and west walls. The temple is not however in line with these gates but is a little to the north, while a stupa (n° 767) stands in the southern part of the courtyard.

The South Guni, 28.80 m long and 17.48 m wide, is built around a solid core supporting the upper storey and the tower, and surrounded by a barrel-vaulted corridor whose eastern wing is notably wider than the other three (3.88 against 2.50 m). As a result, the central core is not in line with the vertical axis of the tower, nor with the axis of the north and south porches. This design provides a larger space for the principal image of Buddha, seated on the east side of the core. On the three other sides are small niches (2 on the north and south sides, 3 on the west side), each one sheltering an image. The total is thus eight images, depicting the eight "great scenes" of Buddha's life: nativity (north side, east), enlightenment (east side), first sermon (south side, east), twin miracles (north side, west), descent from Tavatimsa (west side, north), Parileyyaka retreat (south side, west), taming of Nalagiri elephant (west side, south) and parinirvana (west side, centre).

The corridor is connected with porches to the south, west and north, while to the east is a large entrance hall (7.70 × 7.24 m), with a main porch to the east and lateral entrances to the north and south. From its southeast corner, a staircase leads to the roof of the hall from where a few steps give access to the upper shrine, a vaulted room 3.59 by 3.32 m. under the central tower. Here is achieved the full architectural integration of the upper shrine, whose appearance was noticed first on the 1323 Kubyauk-gyi temple, 80 years older (see Pagan Newsletter 1982).

The South Guni temple is almost devoid of decoration in its present condition: its very few remaining mural paintings can be seen on the eastern face of the core, and most of its external stucco carving has fallen down long ago. This monument was therefore chosen as the first to be strengthened against future earthquakes since the absence of mural decoration will make the injection and insertion of ties technically easier.

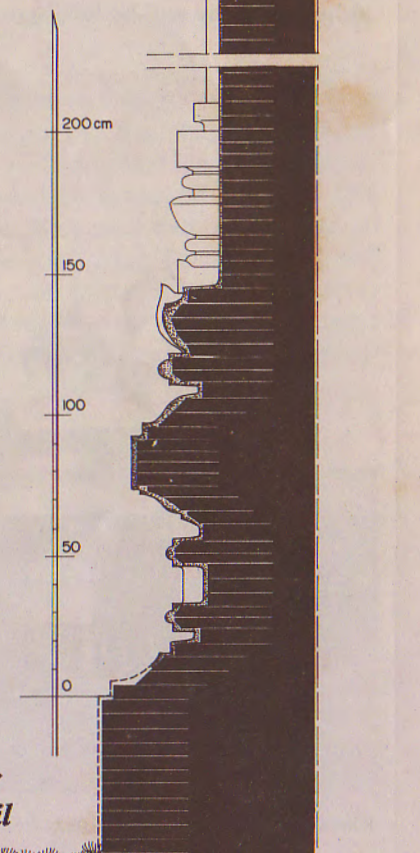


Plan of upper storey

Interior: the east face of the core with the main image.



765 – South Guni from south-east, with 767 on the left



*Southern main wall :
base and cornice detail*

Burmese Timber Monasteries

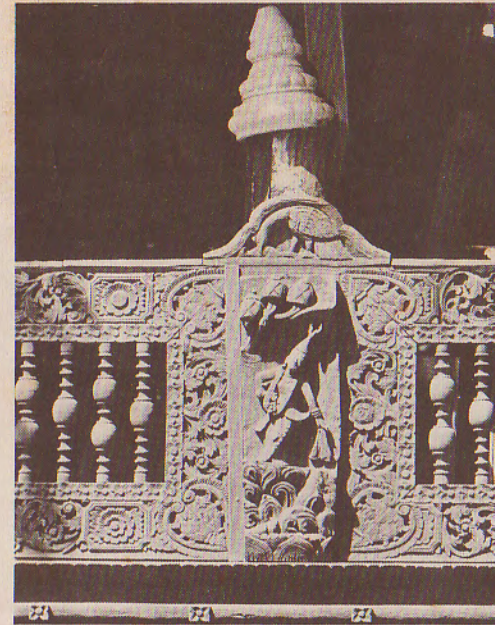
Numerous timber monasteries were erected in villages and cities all over central Burma; the oldest remaining ones date from the 18th century AD, while most date from the 19th century.

They usually consist of five parts, disposed in line from east to west on a wooden terrace: the pythat (a tall spire above the image of Buddha), the monk's quarters, the main roof divided into two halls for ceremonies, and finally the kitchen and warehouse at the western end. The whole structure is raised above ground, the high teak pillars ascending to support the beams of the ceilings and of the wooden tiled roofs. Highly decorated wood-carvings adorn balustrades, doors and door-frames, roof-edges and gables.

Under project BUR/78/023, a French architect, Mr. J. Dumarçay, came to advise on preservation policy for these monasteries whose very survival is presently threatened by lack of maintenance, neglect, fires and vandalism. The restoration and preservation of these outstanding examples of traditional workmanship will be an expensive operation and technical as well as financial assistance from the international community would come timely, for if no action is taken in the near future almost nothing will be left to preserve.



Kim sway kyaung ngaik monastery from south-east.



Sagu: Hman kim kyaung monastery, detail of wood carving.



Monastery at Taungbi: detail of wood carving.

PAGAN *newsletter*

is published once a year during the Project's duration.

Kindly send us names of interested persons and institutions for inclusion in our mailing list.

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